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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/474,032	12/28/1999	XIAOLIN LU	101448	1769

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EXAMINER

LEE, TIMOTHY L

ART UNIT	PAPER NUMBER
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2697

DATE MAILED: 01/31/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/474,032

Applicant(s)

LU ET AL.

Examiner

Yvonne Q. Ha

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Aubert et al. (US Publication 2001/0012272A1 as continuation filed on 9/23/97, now Patent 6,167,027).

Referring to claim 1, Aubert discloses a method for regulating traffic in a network (Abstract, a flow control mechanism for use in high speed packet switching network), comprising: making unavailable an amount (paragraph 0028, unavailable due to capacity reservation) of network transmission capacity as reserve capacity (paragraph 0028, bandwidth is reserved for a network connection to guarantee packet or cell loss is below a specified maximum); and adjusting the amount of reserve capacity based on a desired network performance (paragraph 0028, to minimize the amount of reserved bandwidth that needs to be reserved, the network reserves “just enough” bandwidth to meet QoS requirements).

Referring to claims 2 and 12, Aubert discloses all aspects of the claimed invention and further teaches the making unavailable comprises blocking end-users from gaining access to the network by asserting a traffic regulation signal in a channel of the network (paragraph 0028, peak rate (R), mean rate (M) at which a user can submit data to the network. These are user-specified traffic characteristics).

Referring to claims 3 and 13, Aubert discloses all aspects of the claimed invention and further teaches the traffic regulation signal blocks all end-users or end-users of a specific class, the class being defined by one or more of priority, QoS, or privilege (paragraph 0028, the network reserves "just enough" bandwidth to meet QoS requirements).

Referring to claims 4 and 14, Aubert discloses all aspects of the claimed invention and further teaches the network has a protocol controlling access to the network, the traffic regulation signal being consistent with the protocol (paragraph 0006, X.25 protocol, LAP-B protocol, PLP protocol are ITU-T standard for windowing mechanism, as flow control technique).

Referring to claims 5 and 15, Aubert discloses all aspects of the claimed invention and further teaches the protocol uses one of in-band signals, out-of-band signals or independent channel signals to control access to the network (paragraph 0006, X.25 protocol, LAP-B protocol, PLP protocol are ITU-T standard for windowing mechanism, as flow control technique; figure 1, reference 100 as network connection cloud (it could be in-band or out-of-band to access node)).

Referring to claims 6 and 16, Aubert discloses all aspects of the claimed invention and further teaches the adjusting comprises: monitoring an amount of unused capacity of the network; and asserting a traffic regulation signal in the network if the amount of unused capacity is less than a desired amount (paragraph 0011, techniques of receiving and storing of incoming packet; threshold limitations are set).

Referring to claims 7 and 17, Aubert discloses all aspects of the claimed invention and further teaches the monitoring is performed by media access controllers (MACS) for each media of the network that requires access control (paragraph 0018, connection between access nodes in

order to establish data transfer between X.25 DTE, i.e. end user; paragraph 0030), the media access controllers controlling a local reserve capacity of each respective media based on system parameters (paragraph 0022, access agent uses network protocol to establish, maintain and take down X.25 across the backbone to target users, and ensures a grade of service either meets or exceeds requirements) and monitoring data generated by each of the MACs (paragraph 0023, guarantees bandwidth and fairness) .

Referring to claims 8 and 18, Aubert discloses all aspects of the claimed invention and further teaches exchanging the monitoring data among the MACS (paragraph 0024, connection between access nodes in order to establish data transfer between X.25 DTE); and asserting the traffic regulation signals in each of the media to achieve network performance requirements (paragraph 0011, techniques of receiving and storing of incoming packet; threshold limitations are set).

Referring to claims 9 and 19, Aubert discloses all aspects of the claimed invention and further teaches a central traffic regulation controller controls network traffic regulation (paragraph 0030, controlling at Access points i.e. monitoring, policing of traffic and bandwidth adaptation), the method further comprising: receiving in the central traffic regulation controller the monitoring data generated by the MACs; and issuing traffic regulation commands from the central traffic regulation controller to the MACs to regulate traffic in each of the media to achieve network performance requirements (paragraph 0031, traffic policing scheme or leaky bucket, figure 2 shows leaky bucket connect to network interface to Access agent to end user) .

Referring to claims 10 and 20, Aubert discloses all aspects of the claimed invention and further teaches each of the MACS is one of a dedicated media access controller or an end-user

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that includes a media access function (paragraph 0018, connection between access nodes in order to establish data transfer between X.25 DTE, i.e. end user).

Referring to claim 11, Aubert discloses a network traffic regulation system, comprising: a network that includes media (figure 1, reference 101, 102 Access nodes and multiple end users); and media access controllers (MACs) (paragraph 0018, connection between access nodes in order to establish data transfer between X.25 DTE, i.e. end user); each of the MACs controlling one or more media of the network (figure 1, reference 101, 102 Access nodes and multiple end users), each of the MACs making unavailable an amount (paragraph 0028, unavailable due to capacity reservation) of media transmission capacity as reserve capacity (paragraph 0028, bandwidth is reserved for a network connection to guarantee packet or cell loss is below a specified maximum), and adjusting the amount of reserve capacity based on a desired network performance (paragraph 0028, to minimize the amount of reserved bandwidth that needs to be reserved, the network reserves "just enough" bandwidth to meet QoS requirements).

### ***Conclusion***

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure

- Aubert et al. (US Patent 6,167,027) discloses flow control technique for X.25 traffic in a high speed packet switching network
- Fichou et al. (US Patent 6,072,773) discloses flow control for very bursty connections in high speed cell switching networks
- Haddock et al. (US Patent 6,104,700) discloses policy based quality of service


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4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yvonne Q. Ha whose telephone number is 703-305-8392. The examiner can normally be reached on Monday-Friday 7a.m.-4p.m. Eastern.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on 703-305-4798. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-3988 for regular communications and 703-305-9051 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

YQH  
January 14, 2003

  
RICKY NGO  
PRIMARY EXAMINER